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For the American Bee Journal.

My Method of Wintering Bees.

S. VALENTINE.

The great and all-important question that comes to the bee-keepers of to-day is how to carry the bees successfully through the interval from the 1st of December until honey appears in the spring? With all our noted apiarists, Quinby, Langstroth, Wagner, and others, leaders in apiculture who have uncovered much of the desired gold and made apiculture a pleasant pursuit, there are still dark, shady spots that their wisdom has not brought to sun light, and doubtless to-day there is more gloom hanging over the subject of wintering bees than any other in apiculture. Since the subject of wintering stands first on the list of apiculture, and well deserves the earnest thought, careful study, and accurate experiments of the most practical apiarists, for if we fail to winter our bees and spring finds us without them, we need not bother about their management, forage, or any of the modern improvements, and we are almost certain to lose them sooner or later if they are not properly cared for. The honey bees are not like other insects, but are more or less active all through the winter and require more or less food according to the amount of heat they generate, and as they become numb at a temperature below 40°, therefore the temperature must be kept up by the bees at the expense of their stores, and if they are kept where they are exposed to extreme cold they will require the more food.

I have been experimenting for some years on wintering bees out and indoors, and I am satisfied that bees will winter best at a temperature about 45°; but from experience we have learned that there are 4 things in the hive that are against successful winter-

ing: 1st. A failure in late fall breeding; 2d. Unwholesome food; 3d. Lack of stores; 4th. Regular temperature. The first in importance is a good prolific queen, for if there is an old, worn-out queen, or a poor layer in the hive, the colony will be sure to come out weak in the spring, if not dead. In the early part of September it should be seen to that every hive is supplied with a good prolific queen, and if the hive is crowded with honey so that brood-rearing has been cut short, the lower half of the best comb for that purpose should be extracted, to give the queen room, or if breeding has ceased from a failure of honey in the field, they should be fed and brood-rearing kept up if possible until the last of October. But before feeding the apiarist should see that the combs are not partly filled with unwholesome honey, but here some one may ask, what is unwholesome honey, and how shall I know it? Apple cider, peach juice, grape juice and such like are not honey. When the bees have had ample time to seal up their stores, and it still remains scattered all through the hive unsealed, you can take it for granted it is not pure honey, and will blight you bees. It will pay you well to extract it and feed a sugar.

If you have to feed for winter store it should be done in time that the bees can seal it over before cold weather sets in. A good, fair colony should have 25 or 30 lbs. of honey, on as few combs as possible, sealed over half way down and before putting up for winter quarters there should be a passage made through each comb, commencing about the centre and extending 3 inches upward, nearly an inch wide, that part of the bees are not cut off from the main cluster by a sudden fall in the temperature.

Now we come to the disputed ground: How and where can we keep the temperature most suitable for our bees? There has been a great deal said about both out and in-door wintering, with great diversity of opinion. I would like to favor out-door wintering, for it takes a great deal of labor to remove a large apiary to and from a cellar; but I cannot help but praise the bridge that carries me over.

From experience I am satisfied that in our latitude (39°) we can winter our bees most successfully in a good cellar. All agree a uniform temperature is best and to have uniform temperature in the hive there must be quietness, and for quietness we need darkness and a pure atmosphere, and cannot these desired points be best secured in a good cellar?

It needs no argument to prove that darkness can be best attained in a cellar, and by proper ventilation a cellar can be kept with a healthy atmosphere. Poor results have been referred to in cellars standing at the freezing point; but I would consider a cellar that stands at the freezing point too cold and a very poor one. The temperature in my cellar stood all through this cold winter at 46° and 47°. It is 12½ feet wide by 26 feet long. It has no window, and is perfectly dark; it is right underneath our sitting-room and bed-room, and is ventilated through another large cellar, and has a flue connecting with the chimney; it has a cement floor, but not plastered overhead; the door opens into the other cellar.

There are always more or less bees dying which drop on the bottom board

and often cause the hive to become foul. In the cellar, if properly arranged, they can be transferred to a clean, sweet hive, or the frames removed, and with a piece of tin 4x6 inches clean all dead bees and filth from the hive, and thus keep it clean and pure, which has a great deal to do with keeping them quiet; while on the summer stands, either from packing or a long spell of cold weather, you may not be able to open the hives for months, and a mass of dead, moldy bees, accumulates right beneath the cluster. I know it is claimed that handling bees in a cellar is also injurious, that they become excited and gorge themselves with honey. I claim gentle bees can be handled in a cellar without much excitement, and a colony in good wintering condition has very little unsealed honey and the bees cannot so easily gorge themselves. They seem to know all about it, or at least are very careless about looking for honey. They have to be forced before they will go for it.

My bees are princely Albinos, which are very gentle and easily handled. I have overhauled all of them twice, and some of them a third time, while in the cellar. I seldom used any smoke, and did not find any of them get excited and make a great ado about it. I open the hive without any jarring, and allow a moment's time for the advanced guard to retreat, and then handle carefully, and they were nearly as quiet when I closed the hive as when I opened it. About the middle of February, before I had overhauled them the last time, a few became restless, but after I had closed the hive they became quiet again. One might go into the cellar where there were nearly one hundred, and they would scarcely hear the buzz of a bee. I did not let a hive become foul in the cellar, and I am satisfied the bees are in much better condition than they would have been had I not kept the hives clean.

Six miles from home I had 15 very strong colonies with plenty of honey which I left on the summer stands. On the 10th of February I went to see them, and found one dead with from 30 to 40 lbs. of sealed honey in the hive, and they all had very many dead bees on the bottom-board, some of them smelt badly and had dwindled very much. I have lost one since, and several are in a critical condition.

Last year I bought and started a small apiary of 15 colonies in West Virginia, for experimenting. They did well through the summer. I think it a good locality for honey. Some of them made me from 25 to 40 lbs. of section honey after harvest, and in October, when I saw them last, they were all very strong with bees and had plenty of honey to carry them through, except two, which were badly managed in the early part of the season, and being crowded with work in the fall, I was unable to give them any attention. Now I am in receipt of a letter which states that there are over ½ of them dead.

My home apiary I have been using exclusively for queen-rearing and shipping purposes. Last year we had a very poor season, but 5 weeks of a honey harvest during the first crop of red clover, which ended about July 1st, after that there was very little honey gathered, and our bees quit brood-rearing 3 or 4 weeks earlier than usual. Now every queen-breeder will have an

idea of the condition of my home apiary for wintering. However, about the 1st of November I doubled up and prepared 76 colonies and 24 nuclei for wintering. My nuclei were nearly all out of honey but I had some sections 6x6 and some 5½x6 filled and partly filled with red clover honey, I went to work and made nucleus boxes to suit them, some to hold 3 and some 4; I cut a rabbit 2½ inches deep to give ventilation and room to feed candy on top, transferred the bees into them, but the smell of honey excited some to robbing, and I was obliged to take them to the cellar. They seemed to do well for a few days, but in a week or 10 days became restless, and on examining found about ½ of the bees dead. I cleaned the boxes and bored 2 ½ holes in the rabbit, one in front and one in the rear, to give ventilation; but in a few days I found there was not enough ventilation. Oh! how I wished they could have a good flight; but the weather was too cold. I went to work again and made other lids, with an opening in the centre 2½x4 inches, and covered it with wire-cloth, cleaned the hives again, and put the new lid on, and in a few days found that those bees that were almost helpless had become dry and bright. I succeeded in carrying 19 of them through the winter. I lost 4 by letting them get out of food, and on the 12th of February the mercury rose to 50°, and I put them out for a flight, and lost one queen by swarming out. In the evening I again removed them to the cellar, and gave them some candy, and covered the frames with cloth and they commenced rearing brood.

November came in with colder weather than usual and I was waiting with my colonies to give them a good flight before putting them into the cellar; but severe weather set in about the middle of the month and they did not get it. I put the most of them in the cellar in November, but did not put them all in until the last of December. I had lost 4 colonies before I concluded to put them all in. I lost but 2 in the cellar which starved. This leaves me 70. When I overhauled them in February I gave all of them some candy and fixed them up for brood-rearing, and in a week's time they nearly all had commenced brood-rearing.

I leave them in the cellar and stimulate with candy until mild weather and young bees are hatching freely, then I move them to their summer stands, and cushion on the sides with sawdust cushions. I prefer fine dry sawdust for cushions at the side, as it is the best non-conductor, and will keep the bees warmest. But over the top a chaff cushion or anything that is a good absorbent. I think on top is the proper place to take up the moisture. With this method I have been successful and have avoided much spring dwindling. From 1875 to 1879 I wintered in the cellar with a loss of but 4 colonies. Last winter I wintered with success on the summer stands, and vice versa; but I can assign causes for so doing. We had a very mild winter, and bees could fly nearly every week all through the winter, and my hives had impure honey in them, and I wished to take a trip through Kansas.

It has only been the last 6 or 8 years that there has been any attention given to modern bee-keeping through this



section of the country. There has been some excitement on the subject, but the poor bees were generally left on their summer stands without any protection, and doubtless many of our bee-keeping friends will remember the winter of 1881, as I remember the winter of 1856. That winter set in very cold the 26th of December, and continued cold until April, and we had but one colony left in the spring. But one of the best honey seasons followed that cold winter that I ever knew. This winter the loss will far exceed that of 1856, for there were many more bees to lose. I will venture that there will be a loss of 75 per cent. of all the bees throughout these regions.

This winter has been exceedingly cold with us, the temperature often below zero. Several times way down in the teens, and on the 31st of December and 1st of January it ranged through this valley from 22° to 30° below zero; at my office 26°. Now, bee-keepers of this latitude you may winter your bees safely without much care, but you cannot expect every colony that is not in the very best condition to go safely through such a long cold winter like this without some protection and care. Do men leave their horses and cattle exposed to such severity? No; they provide shelter and comfort for them. In the far West where stock is not thus provided for, this present winter has been very destructive on all kinds of live stock. Thousands of cattle have died on the prairies and Western lands. Now, friends in apiculture, who have lost so heavily, consider well where the fault lies before you give up in disgust and seek some other business that you may think will not be so destructive, and that will pay better.

Double Pipe Creek, Md., March 30.

For the American Bee Journal.

#### Relating to Pedigree in Bees.

WM. F. CLARKE.

It is about time that bee-keepers were seriously considering what steps ought to be taken to render the breeding of improved strains of bees a more "exact science" than it is at present. The multiplication and wide diffusion of untested and cheap queens, while it has no doubt infused a large amount of new vigor into the bee population of this continent, which had become deteriorated by in-and-in breeding, has nevertheless created "confusion worse than confounded" in many cases. Inexperienced bee-keepers who have got untested queens, have hastily concluded, when they saw how different their progeny was from that of the black queens, that all was right; they were genuine Italians, and no mistake. From their ignorance, and with no intention to mislead, hybrids of all grades have been disseminated under the name of Italians, until they have "harked back" to the common type, and lost every vestige of the golden hue that gave them distinction. Well, the cross was worth its cost, which was not much, and the common stock of the country is all the better for it.

But to our best bee-keepers—those who are thoroughly intelligent and enterprising, that hap-hazard kind of improvement is only the "small drop in a bucket" compared with what they are aiming at, and expect to see realized. They believe that we have only got fairly under weigh—the voyage of discovery is yet to be made. There is reason to think as much improvement can be made in bee-breeding as in cattle-breeding, but we are very far yet from having such an advance on the common bee, as the noble short horn is on the scrub race of cattle. Shall we get it? Yes, with the requisite painstaking and perseverance.

To-day, the chief drawback to average short horn excellence is the persistence of a certain class of breeders in demanding that a specific number of crosses on the original native shall pass for thorough-bred. Yet every well-posted breeder knows that such is the prepotency of the native stock, that the old bad blood will keep showing itself for many generations. It is the same with fowls. A significant feather or a redundant toe will tell a doleful story to

the fancier, who desiderates absolute purity.

Until we can control the mating of queens (a consummation not to be despaired of, notwithstanding many failures), there will always be some uncertainty as to the absolute purity of stocks bred in the usual way. We don't yet know how far queens will fly in search of a mate. Mr. Jones says he has "proof of mating many miles away." If that be so it would seem that his plan of isolated islands is the only one that is entirely safe. I never was a friend to monopolies or patents in the bee business, but either Jones has gone to a vast amount of unnecessary expense and trouble to secure infallible purity, or there are a lot of queen-breeders who need shaking out of their boots for carelessness, and a too great readiness to guarantee purity.

Short as is the time since their introduction, the market is flooded with advertisements of Cyprian and Palestine queens. How many who offer such queens for sale can pedigree their stock? A pedigree to be worth anything must have a double action; backward to purity and forward to purity. There must be no probability or guess-work about it. There must be certainty or we are building on a shaky foundation.

As a contribution toward the discussion of this subject I venture to make the following suggestions:

1. That every imported Cyprian, Palestine, or other choice race of bees, should be certificated as to its history, shipment and delivery.
2. That queen-breeders should give their customers particulars as to the circumstances under which their stock is bred. There is a sensitiveness about guarantees which had better be superseded by something equivalent to pedigree. This is done with cattle and other stock. It is not enough for the seller to say, "I guarantee purity," he furnishes the record. In like manner, a treasurer not merely guarantees his accounts, he produces vouchers.
3. That every breeder keep a record or register of extra fine strains that develop in the course of his experience. Just as there are families among the short horns, like the Duchess tribe, of superlative excellence, so, in proportion, is it among bees. Every such strain should be cherished, carefully kept track of, and experimented with, for it is out of the aggregation of these excellent points that the bee of the future is to be evolved.
4. Now that we have at least 3 choice races to experiment with, careful record should be made of all crosses. In due time the lucky hit will be made that will give us the longest-tongued, most vigorous, and consequently most desirable bee. When that hit is made we want to know how to do it again.
5. Will it provoke a smile to propose a public registry of bees, analogous to the "Short Horn" and other herd books? Well, then, as I don't like to be laughed at I will let some one else make that proposal.

Lest anyone should suspect me of having an axe to grind I will say that I am in no way interested in queen-breeding, except as every bee-keeper ought to be; that is, anxious that all may get the best. I never sold a queen, and never expect to. Bee-keeping has always been with me a study and a pastime, "only that, and nothing more." I have never been in a position to keep bees with an eye to profit.

Listowel, Ontario.

For the American Bee Journal.

#### Treatment of Foul Brood.

A. GRIFFES.

Last spring I had one or two colonies affected with foul brood, and thought when they became strong I would start them anew, but one I brimstoned, and in June I discovered more, until I found some 12. The season being poor, with very little honey, I waited until August. Just before sunset I put 3 colonies together in my transfer box and carried them about 1½ miles, so none would come back. I put them into an empty hive that night, with nothing but starters in 2 places on the frames. The next night I took 3 more, and in a few days

put 2 more together. That made 3 colonies of 8, and they filled the frames and reared brood in abundance. I fed them up with coffee A sugar to winter on, and there was no sign of foul brood to be seen last fall. There were 2 strong colonies left; these I put in my cellar and starved for 24 hours, put them in the box just at night, and kept them until the next evening, when I put them in a new hive, gave them a comb with about two lbs. of honey, and they went to work with a will on the buckwheat, and no foul brood in either of them. I found one after that, late in the fall, which I brimstoned. Now, I do not kill bees if I can help it. May become more in the spring.

I have 63 colonies in the cellar and doing well, except one that shows dysentery a little. I expect to lose that one because there has been no time they could fly since last November.

Albion, Mich., Feb. 10, 1881.

From the Chicago Times.

#### How the Bees have Wintered.

PROF. A. J. COOK.

Each winter at the agricultural college, the bees are protected in the several ways advocated in the country, that we may determine after a series of years which is the safest and best. We have become convinced by our own and others' experience that non-protection is never wise, and so have ceased to experiment in that direction. The same holds true as to the method of burying.

Last autumn we placed ½ our bees in the cellar, the remainder were packed in straw one foot thick on each side of the hive. One of these latter was in a Shuck hive. All those left out and packed had 6 inches of chaff above the bees. Each of all the colonies was given some 25 lbs. of good honey. All were prepared for winter the 10th of Nov., 1880.

Owing to the severe and continued cold the bees were not able to fly from their hives for 5 months. March 10 they could fly, and all were examined. Those in the cellar were all in good condition. Of those out-doors half were dead and the others weak. The one in the Shuck hive was best off. We then put all in the cellar, except those in the Shuck hive, which have since died. The others are all alive yet, and we feel quite sure we can save all, unless the weather fights it out on this "blizzard" line all summer.

All through Michigan the same holds true. Bees in good cellars have suffered very little. I even know of some that were moved into such cellars as late as the 1st of December that have come through all right. Those in chaff hives are, so far as I can learn, from ½ to ¾ dead, with the tendency strong towards the dead line. Those left unprotected are all dead.

Another feature not without interest in the matter is the amount of honey consumed. Bees in the cellar have eaten but very little; those out doors have consumed 2 or 3 times as much. Our bees in the cellar have eaten, in every case, less than 10 lbs.; those out doors have in some cases left but very little honey in the hives.

I have no doubt but that the cause of the great mortality is dysentery, induced by over-eating and long confinement. Bees, unlike most insects, are not dormant in winter, but with the temperature just right—from 35° to 45°—they are very quiet and take but very little food. Thus conditioned they will bear confinement 6 months with no apparent harm. But if the air becomes much colder than this, or much warmer, especially if long continued, the bees become uneasy, eat more, become distended with the refuse in their food, and unless soon able to fly forth and void their feces are attacked with fatal dysentery. In cold weather this activity, whether of motion or functional, is to supply the heat necessary to preserve life, and the extra activity demands an extra quantity of food. The heat in a warm atmosphere becomes an irritant which produces uneasiness, and, as a consequence, more food.

I believe that with good food and a cellar which will preserve the proper uniform temperature we may bring

bees through any winter safely. It has been done in all the trying winters of the past. Where there has been failure inquiry showed that the bees were in a poor condition in the autumn, or that they had a poor quality of honey, or else the cellar was not so arranged as to preserve the uniform temperature. The old idea that a cellar must be dry is not wholly correct. I have tried a cellar for the past 2 seasons that had several inches of water in it continually, and with entire success. Such a cellar ought to be well ventilated. Chaff hives usually may do as well as a cellar. But that they will prove as safe as a first-class cellar in very severe winters does not seem to be verified by the past "season."

As probably ½ of the bees in the Northern States are dead, we may well look for a corresponding decrease in the honey production; and with a lessened supply will come an increased demand and high prices. The prospect for an unusual production in California will only partially make up this deficiency. Lansing, Mich.

For the American Bee Journal.

#### Top vs. Side-Storing.

JAMES HEDDON.

Yes, I once heard of, and used, 32 hives that were strongly advocated, as exclusively side-storing hives. They were called the "New Idea" hive, and were invented by Adair, Gallup & Co. They stored both comb and liquid honey on one side or both sides of the brood-nest. All of us who were induced to leave the old standard Langstroth and adopt the long hive, either wholly or in part, soon saw our mistake and returned, like prodigal sons, to former habits.

Next, I conceived the idea of a combination of top and side-storing, and made a dozen or more hives for that purpose (one of which still occupies valuable room about my houses), but soon discarded them as no better than the all-top-storing Langstroth, and more than twice as much labor to manipulate.

Now, I do consider the shape of Mr. Doolittle's hive faulty, because I, like him, prefer small hives, which are more easily kept chock full of brood, and which I have never seen occasion to disclaim since I so warmly advocated them, some 6 or 7 years ago at our State Convention at Kalamazoo; and if small, they cannot be extremely high unless very narrow and short—not very long, unless very narrow and shallow. For wintering I prefer fewer ranges of comb and longer ones, as bees move back and forth with the ranges easily, when they cannot do so across them. The 8-frame Langstroth hive seems to me to be about the happy mean between the extremes. It is narrow enough for wintering, it is shallow enough and has top surface enough to avoid the necessity of putting boxes at its sides, thus causing the master to place them twice before removing them. Is it not very plain that one man can care for double the number of colonies with my case system that he could do with your method, where the surplusage has to be handled over twice or more before its removal?

Why, side-storing was the original plan, before the skillful Langstroth or any other bee-keeper invented open top frames, and no doubt has been used by hundreds of apiarists years ago, both exclusively and in conjunction with the newer and better plan, yet for once I am on the popular side of this question, as hundreds to one use and swear by the flat top-storing hives. Still, it might be wrong, but I think not. I bring as evidence the well known fact that the very first place that bees use the first wax in the spring is in the top of the hive, between the top bars and cover. If I used a hive that had only about one square foot top surface, and used boxes 6 inches high, I do not know but I should look more kindly toward the complicated system of moving boxes from the wrong place to the right one about the hive, rather than tiering up such high boxes whose tops were already so far away from the center of the brood nest. But with hives with once-and-one-half the top surface, and shallower combs used under sections only 4¼ inches high, all full of comb foundation that is so well



made the bees take it for young combs, I think that the man who would change to any other arrangement must see something that I cannot.

When the first twenty-four  $4\frac{1}{4}$  sections are  $\frac{3}{4}$  full, or less, if the bees seem anywise crowded, up they go and under goes another case of 24 more, so fixed that the labor is about one-half done to begin with. Now we have 50 lbs. capacity on the hive, and the topmost piece of comb in the whole arrangement is less than 18 inches from the lowest cell in the hive. How much shorter is the distance from cell to cell in Mr. Doolittle's arrangement? If it should happen, as it sometimes does, that more room is needed before the first case is all complete, shove under another, or two of them if you choose, and take my word for it, all will go along satisfactorily.

Like Mr. Doolittle, I speak from experience. About 10 years ago I used a 40 lb. box. It was 15 inches square, and about 7 high, and contained top-bars. It was used on a bar hive of its own size and 13 inches deep. I tiered up 4 of them on one hive at one time, and had them all finished, and a fifth one nearly half completed when the season closed. I also tier up the 5x6 sections with about 15 colonies out of 100, each tier containing a capacity of 45 lbs., and the system works perfectly here. There may be a difference in localities, but I feel sure that the 1 lb. sections in the shallow cases will work well tiered up anywhere.

I hardly ever give my "experience" to prove my opinions, as it is so very difficult to prove the experience first, but thinking that perhaps many readers will be as willing to take my word in this controversy as I am that of my esteemed friend Mr. Doolittle, I will further say that I once obtained 410 lbs. of surplus honey from one colony in one season, 48 of which was extracted from the brood chamber, but 362 of which was comb honey taken upon the tiering up system from the top of one of those 15 inch square hives, 13 inches deep, in boxes about 7 inches high, and not a particle of starter of any kind used at all. Now, reader, if you had met with the same experience with such fixtures as the above described, would you be afraid of the "tiering system" with the modern appliances, as described further back? I agree with Mr. Doolittle, that bees will store honey faster above than at the sides, and I also claim that where they prefer to store nectar they prefer to construct the receptacles to hold it. Above is the heat and odor of the hive, also is it further from the entrance (where envious enemies can come), and, according to Mr. Langstroth, the very place where bees could and would soonest put their surplus combs of honey.

I wish to say to Mr. Doolittle, that when I find a queen that fails to fill my 8 frames reasonably full of brood (outside and over all), I supersede her at once from my best stock. I have been talked to considerably because I did not use 10 Langstroth frames instead of 8, but I do not care to whip up my queens at all, so long as they are normally prolific. Rather cut down the number of frames, because, recollect, the capital lies in the combs and hive, and not in the queen. I have no trouble with clogged brood chambers, because my sections have perfectly free communication with the brood nest, which is flat, and as they are well supplied with that which is comb in 12 to 24 hours at the option of the bees, they leave the cells below for the queen, knowing that she will not want to commence a brood nest in so small sections of comb as  $4\frac{1}{4}$  inches square. All these points have been thought over and put to test during the past 5 years.

I am aware that different localities demand different systems of management; also, that these different systems suggest different forms and sizes of hives and other fixtures. Nevertheless, I hope some good may grow out of the earnest and pleasant discussion of all subjects pertaining to our favorite pursuit.

I am at present much hurried with home labors, besides 6 regular communications promised each month, and I will not be able to reply to Mr. Doolittle's friendly criticism upon my ideas of

bee disease till the first issue in May next, when I will do so with pleasure. I feel sure of my premises, and of my ability to make them clear to the readers of the BEE JOURNAL.

Dowagiac, Mich., April 11, 1881.

For the American Bee Journal.

### Artificial Swarming.

HENRY ALLEY.

Hundreds of bee-keepers will make an effort during the coming season to build up their apiaries destroyed the past winter by the severe cold weather. How can the old combs be best utilized and colonies increased in the most economical way? I will give my views on this point as I have had some experience in this part of the business. Artificial swarming will have to be resorted to for rapid increase of colonies. It should not be attempted too early in the season. Old colonies should not be disturbed until they are full of bees and honey, or, in other words, till they are ready to swarm.

Then if the new colonies are to have the old combs only a moderate quantity of bees should be taken out and at the proper time a queen gives them. Three quarts of bees will make a fair sized colony. The parent colony should then be left 10 days at least (14 days is much better) before it is disturbed again, for this purpose this can be done as often as every 2 weeks, provided the old colony retains the queen. Do not remove the queen and bees too; artificial swarming in that way would soon ruin the best apiary. If the parent colony is forced to rear queens and bees, too, artificial swarming would not be a success. A good queen is worth \$2 on an occasion like this.

The reader will readily see that if the bees and queen are removed from a hive the remaining bees will have up-hill work to build up again. What bees remained could not rear a vigorous and strong queen, especially if the old colony is removed from the stand and the new hive put in its place.

If queens are given the new colony, 3 times as many colonies can be made in the course of the season as could be done if the old colony is forced to rear queens every time.

Artificial swarming can be practiced up to August 10. I would not advise it done later than that date, because the colony would not have time to rear a sufficient quantity of bees to insure safe wintering. Old bees cannot stand the rigors of winter, and in fact their lease of life would run out before spring opens, in any event.

Natural swarming cannot be depended upon for rapid increase. With liberal feeding and supplying the new colonies with queens 5 good strong colonies could be made from one, between June 1 and Aug. 10. I do not advocate too rapid increase. If forage is not abundant feeding must be resorted to. Do not let the feeding go till too late in the season, trusting the bees to get their living. Commence to feed as soon as the colony is ready for business, and that will be the next day after they are put into the hive. If you would make this whole arrangement successful do all the feeding not later than Sept. 20. A little food might be given later to stimulate breeding. All the syrup given them should be sealed up before cold weather sets in or it would sour before spring, and dysentery might be the result.

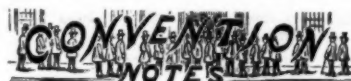
My plan for feeding is this: To 6 lbs. of coffee or granulated sugar add 2 qts. of water. Dissolve in hot or cold water.

The best feeder for general use is a pint "improved Mason fruit jar." These jars have glass tops. Remove that and substitute a tin one. With a brad-awl make from 4 to 20 holes; for slow feeding make from 4 to 6. When a honey board is used make a hole  $1\frac{1}{4}$  inch in diameter and place the jar over it. If feeding at the entrance is desired make a box large enough to take in the jar, and raise it from the bottom so that the bees can pass from the entrance of the hive under it.

To introduce queens and make new colonies at the same time proceed thus: From a strong colony take one full comb and place it in the new hive, filling up

the hives with empty combs; then shake about 3 qts. of bees in front of it. When they have all run in close the entrance with wire cloth. If the hive has a portico nail the wire on front, or better still, have a screen made for the purpose. The idea is to give the bees plenty of air. Leave room between the entrance and wire cloth for the bees to fly or run about. Keep the bees shut in 36 hours. Keep a wet sponge against the wire screen and they will not suffer for water. If this is done towards night they can be let out the second morning after, and being few will return to the old place, as they will become reconciled to the loss of the queen. Let the old hive remain in its place and put the new one 5 or 6 rods away. At the end of 2 or 3 days give the bees a few puffs of tobacco smoke and let the new queen run in. Do not put her near the hive till she is introduced. In the course of 8 days examine the brood given them and if they have any queen cells destroy them. Combs taken from the hives where bees have died with dysentery can be used without danger. I have tried it.

Wenham, Mass., April 5, 1881.



### Rock River Valley.

The Rock River Valley Bee-Keepers' Association met in Monroe, Ill., March 29, 1881. Few members being present (owing to the impassable condition of the roads) the forenoon was spent in general consultation concerning the welfare of the bees. At 1 p. m. the Convention was called to order and the following officers were elected for the ensuing year:

President, A. Rice, Byron; Vice-President, H. Everton, Monroe; Secretary, D. A. Cipperly, Monroe; Treasurer, J. J. Crill, Monroe.

The Treasurer's report was read and approved. Members reported as follows:

Number of colonies in the fall 207; number of colonies at above date 44. Two reported surplus: H. Everton, 300 lbs.; E. Lucas, 600 lbs.

E. Lucas reported no loss from 38 colonies, with plenty of honey and brood.

The cause of bees dying with plenty of stores, both in cellar and on summer stands, was requested to be answered in the AMERICAN BEE JOURNAL.

[For answer see next page.—Ed.]

The President's address is as follows:

#### President's Address.

Ladies and Gentlemen:—We meet today at the close of one year's existence of our Association, to discuss questions of interest pertaining to bee-culture.

Our meetings have been attended with a good degree of interest, notwithstanding the unfavorable season for bees. Our interests have been one, our actions harmonious—"United we stand, divided we fall." I believe we shall find it not only pleasant but profitable to meet occasionally to impart what we know, be it much or little, about the management of bees. When each of us comes to get, and none to impart our knowledge (which I trust will never be), it would be advisable to indefinitely postpone our meetings.

The different races and grades of bees, the different ways devised to secure the largest income for the smallest outlay, is what we have all been striving for until it would seem impossible to more than repeat the words that have been spoken many times before; therefore nothing new will be expected of me at this time.

Of the different races of bees in existence there is one that has not had its share of attention, although it has associated itself intimately with the whole human family from our first parents to the present time, and that is the "may bee." Did not mother Eve say to her husband, "take and eat of this fruit (although forbidden); may be it will not hurt us, may be it will do us good?"

At the National Convention, at Chicago, we understood from an able bee-master that we might take a colony ever so carefully in our arms from the apiary to the cellar, may be it will die. Take another colony on a barrow, however roughly we handle it, may be it will live. We further understood from the same gentleman that one colony might go South and may be gather healthful honey and live. Another colony go North and may be gather poisonous honey and die.

Have not most of us had too much to do with that may be? Do we not too many of us too often say may be the winter will be warm and the bees need no care; maybe it will be as well to pack or cellar the bees in December as November; may be they have honey enough or will gather enough, etc., in ways almost without number? That may be proves fatal to our bees. I will leave the may be, only saying that it is not and never was a scientific bee.

Our attention is often called to the differences of opinion about the management of bees. One gentleman at the Convention in Chicago said in wintering bees in the cellar it is of first importance to keep the cellar dark; another said that light does not disturb his bees in the cellar, that he does not darken his windows and leaves the door open in the daytime, as occasion may require, with no injurious results. We have all noticed that with the shades of evening our bees return to their hives, and go forth to their labor with the light of day, except it is stormy or too cold for them to fly, and I have found bees improving the first opportunity to leave the cellar after opening the door, when the atmosphere was sufficiently warm for them to fly, and I think it would be impossible for us to educate them otherwise.

The relative value of the imported to the home-bred bees has, of late, been somewhat discussed. The resolutions of the National Convention, at Cincinnati, are as follows:

1. Resolved, That the importation of pure Italian, Cyprian, and Palestine bees into North America ought to be encouraged for the sole purpose of adding new and different strains of blood to that which we already have.

2. That the strains of Italian blood which we now have has reached a higher standard of excellence than is to be found in the native home of the Italian.

3. That queens reared from pure, selected, home-bred Italian mothers, should command at least as high a price as those bred from imported mothers, where pure Italian stock is the sole object desired.

I think the 2d and 3d resolutions are rather in conflict with the 1st, for how can we import and sell at the same price as those that are only bred from home stock? The question for us to decide is, which will we patronize—the price being equal—those who breed from imported or those who breed from home stock? Most of us will always pay the importer the higher price.

The past year has been a failure with bees and honey to nearly all in this vicinity. Very few report any surplus, therefore the question to solve is, what shall we do? Shall we give up the business or shall we try more and better care for our bees in winter, spring and summer, giving the little attention they need when it is required, carrying our bees through to the time when flowers give them a bountiful supply of the best of all sweets; when they in return will reward us by filling our surplus boxes? How we shall care care for, and how and what we shall do for the bees I must leave for the convention to solve. A general discussion followed.

The Convention will meet at Monroe Hall, on Tuesday, May 24, 1881. A general invitation is extended to all that are interested in the management of the apiary. D. A. CIPPERLY, Sec.

The Eastern New York Bee-Keepers' Association will hold a Convention in the Court House at Schoharie, N. Y., May 10 and 11. All interested in bee-keeping are cordially invited to attend. W. S. WARD, Sec.

Fuller's Station, N. Y.





THOMAS C. NEWMAN.  
EDITOR AND PROPRIETOR.

CHICAGO, ILL., APRIL 27, 1881.

### Welcome, Spring! Come at Last.

Once more the robin's cheerful piping and the bluebird's merry song can be heard in the early morning, as the golden sunshine tips the hill-tops, and the hills and valleys are arraying themselves in their gorgeous robes of emerald green. Soon dandelions, maples and fruit trees of all kinds will be in bloom, closely followed by an abundance of white clover, the leaves which are already becoming very numerous; a little later will follow a heavy basswood bloom, and we now believe the goldenrods and other wild flowers will be equally plenty. We hope our bee-keeping friends are now prepared for a vigorous season's work; if not, they have no time to lose, and especially is this true of those who are obliged to re-stock anew. Bees cannot now be moved too soon. Those expecting bees from the South should have them shipped at once, before the hives are filled with new honey to daub the bees; those about to purchase bees should do so at once, thereby securing the first swarms, which will soon be cast in the South. We think now is the best time to buy, as every indication points to much higher prices, as soon as bloom is well developed and the prospect for a heavy honey flow and a good market are verified.

Quite often we receive a rather uncourteous letter because the BEE JOURNAL is discontinued when the time is out that has been paid for. We try to please all our subscribers, but it is not an easy task for us to determine who does and who does not want it so continued. So we must ask to be informed on the subject. The following letter is just received and is just the kind of a notice we wish all would send who desire to have it sent without intermission. We then put this mark, || after the name on the wrapper label, and when so marked do not stop sending the JOURNAL until we receive an order from the subscriber to do so.

"Please continue my JOURNAL right along; if I do not send the money on the day it runs out I do not want you to stop it, for I want every number as soon as it is published. I will send you the money just as soon as I can make it convenient to go to the post office to get a money order. W. C."

Now, if all who desire it so continued would drop us a postal card, or mention it when they are sending a remittance, it would save us much trouble and themselves the annoyance of having the JOURNAL stopped.

With this number several hundreds of subscriptions expire, and we hope all will renew at once or else send us notice by return mail if they desire its continued visits.

The next meeting of the N. W. Illinois and S. W. Wisconsin Bee-Keepers' Association, will be held at H. W. Lee's, 2 miles n.w. of Pecatonica, Winnebago county, Ill., on the 17th of May, 1881. J. STEWART, Sec.

### Review of the Situation.

From the East Saginaw, Mich., papers we learn that Dr. L. C. Whiting has received reports from parties owning at the commencement of winter 1,359 colonies of bees. Of this number only 432 are now alive, and many of these are weak—and the end is not yet.

The Herald gives the following table showing the number of colonies last fall and the number lost:

	No. last fall.	No. lost.
Orlando Cole	12	5
J. Lyon	3	3
Jas. Ure	18	17
O. J. Hetherington	80	10
— Br wn	250	249
John Rey	16	14
Conrad Fey	18	17
C. W. Kimball	32	30
Wm. C. Mower	30	30
C. S. Grant	12	..
— Costello	20	..
Frederick Suer	93	93
Lucy Wilkins	7	7
Samuel Goodrich	50	2
H. Cheener	106	105
H. Cheener, Jr.	17	17
— Crawford, Chesaning	11	10
— Mitch II	10	4
— Jones	25	25
— Kanooff	18	7
— F. ep	36	24
James Adams	5	5
— Bailey	9	9
— Sindle	12	12
Wm. Smith	15	12
Davis Hinckley	15	11
— Green	30	10
Man at Flint	100	78
Wm. H. Coleleigh	28	27
Wm. McNeller	9	9
Wm. Leland	8	6
John McGregor	58	20
Levi Falker	31	31
Chas. Fort	13	5
Otto Vasse	6	6
Otto Vasse & Bro.	4	4
Hiram Fall	6	6
Ed. Munter	8	5
— Sheebs	30	30
— Beeman	40	8
— Telf	25	25
Dr. L. C. Whiting	90	50

Of course we give the above table from the Herald, without vouching for its correctness, and without the knowledge of the parties named except Dr. Whiting, who very kindly sent us the papers.

It will be seen that the Misses Wilkins, of Farwell, have been the most successful, losing but 2 colonies out of 50. These ladies are among the most intelligent and progressive bee-keepers—their honey is always very attractive, and it is a pleasure to know that they are so successful. On our Museum shelves is a single-comb box of beautiful honey from the apiary of these ladies. It has been there since 1877, and has never leaked a particle, but looks as enticing to-day as ever. It was purchased where they sold their crop, without their knowledge.

We make the following extract from a recent letter from D. D. Palmer, Mercer county, Ill. Mr. Palmer's neighborhood has heretofore been one of the most successful bee-keeping districts in S. W. Illinois. The initials given represent apiarists of the highest order of intelligence, and will be readily identified by persons familiar with the reports of the Western Illinois & Eastern Iowa Conventions:

"I had 240 colonies, none left; S. 180, 20 left; L. 50, 3 left; H. 60, 20 left; L. 800, but few if any left; C. 163, 8 left; B. 56, 16 left; H. 40, 17 left; H. 15, 6 left; K. 17, 7 left; and so I might go on through the list. Those that are left are weak, and the end is not yet. The words of Thomas Paine are applicable to us bee-keepers, 'These are the times that try men's souls.'"

James Heddon, Cass county, Mich., puts his loss at one-half, and those left are very weak. G. M. Doolittle, New York, estimated his loss at 40 per cent., and was not yet "out of the woods." A. F. McKenrich, Iowa, reports almost a total loss in his locality, and C. W. Hellems, St. Catharines, Ont., gives 90 per cent. as the average loss there; at Hartford, Wis., there are probably less than 100 left out of 462. T. B. Quinlan

thinks not more than 1 colony in 10 has survived around Cedar Rapids, Iowa. Some weeks ago Mrs. Dunham, Brown county, Wis., thought very few bees would survive in that district. I. R. Good estimates the loss at nine-tenths in Northern Indiana.

Losses in Maryland, Pennsylvania, Ohio, Kentucky, Missouri, Kansas, and all States north of this line will prove unprecedentedly heavy. Those left are generally in very light condition, and will require close attention and scientific management to fit them for a vigorous summer campaign.

It will be observed, by a study of the mortuary reports published in our letter department from week to week, that no Northern locality has been exempt from heavy loss, no manner of packing has been a guaranty of success, cellars have been more or less faulty, caves were transformed into charnel houses, corn-stalks, straw and hay covered over them have failed to retain life, and the angel of gloom has found them as surely, and perhaps more quickly, where not prepared at all. Nor has any particular style of hive earned especial encomiums; the best approved frame hive has shared equally the odium with the log gum and box hive, and patented clap-traps have failed as life-insurance policies. The bees have to a great extent died, and no bee-keeper, however learned and scientific, need blush to acknowledge that his bees, too, have been decimated by the long and unprecedentedly severe winter just passed.

We observe that at the late session of the Rock River Valley Convention, at the roll-call of colonies only 44 were reported living out of 207, 38 of which were brought through by Mr. Lucas without loss. We were requested to give "the cause of bees dying with plenty of stores, both in cellar and on summer stands" (see page 131). We must evade the question by the general answer, "The long, cold winter;" and yet, although an evasion, it is the only correct answer that can be given. During a mild or ordinary season, the requisites for successful wintering are not nearly so exacting as for a terribly severe and protracted season. A little defect in food is easily cured by one or two purifying flights in January; if all are old bees, the mid-winter thaw gives them a new lease of life, and the queen frequently takes advantage of it to deposit a few eggs; if the majority are new bees, a flight (which perhaps some have never had) gives opportunity to change position, and invigorates them for that "masterly inactivity" so necessary to a prolonged life; if perchance the cluster has become divided, a broken winter gives opportunity for reuniting, and for diseased bees to become disengaged from the mass; if dampness pervade the hive (which is more or less the case in winter) it does but little if any harm so long as not congealed, but with extreme and protracted cold, it begins freezing at the outside, and chilling to the centre till it comes in contact with the bees, when they become benumbed, their physical organs cannot perform their functions, proper digestion ceases, and the bees die. The foregoing remarks are more or less applicable to all cases of out-door loss.

The losses in cellars and caves so prevalent the past winter are equally attributable to its length and severity. A successful confinement of 4 to 5 months

requires that all the minutiae should be very exact, and it is easy to imagine how the absence of the least requisite to success may become the principal factor in producing death. Were it only the lesser bee-keepers or the novices who had suffered the heaviest losses, it might perhaps be attributed to ignorance or negligence in preparing them; but when we take into account the heavy losses by so many specialists and scientific bee-keepers, we cannot but look upon such a charge as an insult to intelligence. All the approved methods have equally proven failures.

We have been much interested in a series of experiments being conducted by Mr. E. D. Godfrey, of Iowa, and would be pleased to hear from him the result of last winter, together with his method of preparation, and the general conclusions reached.

But with the bee-keeper all is not lost, though he has lost all; with his hives and combs left, he still retains one-half or two thirds of his investment. The fruit-grower expects frequent failures in his crops, and is thankful that his trees survive without injury; the farmer's wheat winter-kills, when he plows up the ground in spring and plants anew in corn or something else, and replants if frost kills that; the stock-raiser who loses part of his flock, gives the remainder better attention, and patiently toils two or three years to repair his losses; the merchant has his seasons of loss, but with renewed push and activity makes up for the dull times when the "good time coming" has arrived; the stock-broker loses on his World-Belt Railway, projects a Short-Cut Line to the Moon, waters his stocks, and rides on the fleecy clouds of imagination to success; the speculator invests in anything possible, loses a part or all, compromises with his creditors, and with unconquerable zeal pushes on to success, a living monument to pluck; and the energetic bee-keeper, although many bright dreams may have vanished, will not despond, but without taking time to count the untenanted hives begins immediately to estimate the number he can refill. If the bees are all dead, he procures enough for a comfortable start, goes to work with a will to retrieve his losses, and while keeping time with the musical hum of his bees, in the "Sweet by-and-by" will reap a more than commensurate recompense for his vexations and disappointments.

Dr. N. P. Allen, President of the National Society, intends to be present at the Texas State Bee-Keepers' Association, at McKinney, Texas, on May 12 and 13, by invitation of Vice-President Collins. He is also invited by Vice-President Hipolite to spend a few days in the interest of bee-culture in Arkansas. He also intends to be present at the Missouri State Association if the time be fixed for the 1st week in June; being specially invited by Vice-President P. P. Collier. Dr. Allen starts on this trip during the first week in May, and we shall expect many items of interest from him concerning bee-culture in these States.

The Southwestern Wisconsin Bee-Keepers' Association will meet at the residence of W. B. Wallis, at Darlington, Wis., on Wednesday, May 11, 1881, at 10 a.m.





## MISCELLANEOUS.

**Late Season in England.**—In the London Journal of Horticulture, Mr. Frank Cheshire says:

Few seasons would show more clearly the advantage of a special calendar than the present one. The lateness here is extreme, the temperature low, and the "weather forecast" not encouraging. In early springs, peach blossoms have been open on a south wall of ours on March 1, but now, April 4, the fully swollen buds are yet waiting for a change before expanding.

**Buying Bees.**—The Indiana Farmer gives this good advice:

To those who contemplate buying bees we would say do so at once, buy now so as to take advantage of the season's work. If you cannot afford to buy full colonies, get good, strong nuclei, buy them early and they will grow into good colonies during the season. It is best to buy as near home as possible as express charges are very high. Send to responsible dealers and stipulate that the bees must come early, so as to have advantage of all the increase of the season.

**Feeding Bees in the Spring.**—In the Prairie Farmer Mr. L. Harrison gives the following as her advice on this very important subject, at this season of the year:

Naturalists teach us that insects during the larvæ state consume more food than they do during the remainder of their life. The queen bee is a wise and prudent mother, and counts the cost of their production, and governs her procreative powers according to her income. She regulates her laying, not by the sealed stores in the hive, but by the amount brought in daily by her subjects.

If we wish to have our bees populous, to profit by the early bloom, we must practice some strategy upon the "old lady," by which she is made to believe that the honey flow is continuous and abundant. Some bee-keepers recommend candy, of which sugar and flour of some kind are the principal ingredients. The objection to this kind of food is that bees must have water in order to manipulate it, and in order to procure it must leave the hive in inclement weather, and may get chilled and perish. Thin uncapped honey is always found in the spring adjacent to the brood, and we should imitate nature as nearly as possible. Warm diluted honey, nearly as thin as it is when brought home from the flowers, and a substitute for pollen, either in unbolted flour from wheat, rye or peas, should be supplied them in such a way that they would appropriate it to their use. There are many ways of feeding honey or syrup in vogue—such as a tumbler covered with muslin and inverted over the cluster, or a fruit can with perforations in the cover. It matters not how, so that the warmth of the hive is retained, and that the bees feed readily from it.

We have two feeders on some of our hives, one containing thin honey and another with unbolted wheat flour, and although to-day, March 30, is windy with the thermometer at noon only 2° above freezing in the shade, the bees are rolling and tumbling in the flour, and working it into little balls upon their legs. In some localities it is an advantage to feed flour, in sheltered nooks in the open air, but here it is different. The overflow from the river draws the frost from the roots of the elms and willows so that they are in bloom almost as soon as it is warm enough for bees to fly.

Plenty of sealed honey should be in the hive during the spring as a safeguard against starvation—a sort of lifeboat or contingent fund, to be drawn upon during an emergency, such as a cold storm.

## SELECTIONS FROM OUR LETTER BOX

**Early Drones.**—My 20 colonies of bees, put in the cellar Nov. 13, were taken out a few days ago, 16 living, and one of those much reduced, being in the cellar 147 days, in Langstroth frame hives, without division boards or cushions, and the same as they stood in the apiary in summer. This is the best result in wintering bees that I can hear of in this county. B. lost 21 out of 24, cellar wintering; P. 13, all he had; and 4 other bee-keepers, having 82 colonies, lost all, mostly of dysentery. I have taken no pains to gather information as to the extent of the mortality of bees in this county, but what I hear is truly discouraging. Please tell me in the BEE JOURNAL why one of my colonies has plenty of drones flying, and the drones are associating with the other colonies; some colonies are killing them, while others are not molesting them. This colony had an Italian queen introduced last September, purchased from I. S. Crowfoot, of Wisconsin.

H. I. BRICHENER.

Decorah, Iowa, April 11, 1881.

[The queen is either an old one or physically deformed, so as to make of her what is termed a "drone-laying" queen, and in either case should be superseded.—ED.]

**All Gone.**—On Nov. 12 I put 100 colonies in a cave. They had plenty of honey, all are dead but one; I packed 10 with chaff and corn fodder and they are all dead but one; leaving me 2 colonies out of 110. Mr. Brown had 200 colonies in a cave and all are dead but 5. Mr. Brown and I have put our bees in caves for 8 successive winters and have had success till this winter. Mr. Ward had 22 colonies in the cellar; all are dead. Mr. Wilson had 25 colonies in a dry cellar with plenty of honey, and all are dead. Mr. McAllister and Mrs. Kendall had 4 each in cellars and all have died. Mr. Cole had 9 left out of 14. There are others in this county but I have not heard from them yet. I am well pleased with the Weekly BEE JOURNAL and would not do without it.

A. F. MCKENRICH.

Camanche, Iowa, April 11, 1881.

**Bees in Good Condition.**—I had last fall 18 good colonies, and have 18 left now, all in good condition. They were wintered on the summer stands. I am confident I can winter bees as safe as other stock.

S. H. HUTCHINSON.

Mechanic Falls, Maine, April 10, 1881.

**Lost 3 out of 60 Colonies.**—At least 65 per cent. of the bees in this locality I think are dead; quite a number having a few colonies last fall have lost all; others having 20 to 40 colonies have only 2 or 3 left. Of the few of our most successful bee-keepers are Messrs. Hoffman, losing 35 out of 120; Drake, 10 out of 45; Clement, 60 out of 100, and Gans, 50 out of 100. Bees are wintered here mostly in cellars. I put 60 colonies on the 5th of Nov. in a bee house, lined and filled with a foot of sawdust, and up to the present have lost only 3 colonies. I have all Italians, except one colony of Cyprians. I cannot do without the BEE JOURNAL.

A. M. WOLCOTT.

Monroe, Wis., April 18, 1881.

**Safely Wintered.**—After a confinement of 160 days my bees are in excellent condition, considering the severe winter they have passed through, being the most severe we have had for 20 years. Last fall I had 32 colonies, all natives but one colony of hybrids. I prepared 13 of them with chaff cushions on top in Langstroth hives. The rest were box hives. They were put in the cellar Nov. 30, and brought out April 9, all in a thriving condition with the exception of 4 colonies which I shall have to feed for a short time as they were late swarms. Many have lost heavily in this section. I find that all my neighbor bee-keepers and box hive men

who do not take a bee paper are the heaviest losers in bees. My bees were wintered at the Lake View Apiary, belonging to Mr. R. Squier, where there were 60 colonies and all came out alive. I did not think at first that I should like the Weekly as well as the Monthly, but since we have the news fresh every week I like it much better. I await its coming as that of an old friend. It is just what we who are engaged in bee-culture need. Success to the Weekly BEE JOURNAL. J. G. A. WALLACE.

Brighton, Ontario, April 9, 1881.

**Will Hogs Destroy Sweet Clover?**—Royal jelly is young brood in the white state. In 1855 or 1856 I saw legs and breasts plainly in it in a colony preparing to swarm which had no time to properly cut it up fine. I am satisfied that Rev. Mr. Mahin is right about bees and grapes. Birds are the main cause of damage to grapes. Will hogs destroy sweet clover roots, if they are "running," where they can get at them?

LOUIS HOFSTATTER.

Louisville, Ky., April 1, 1881.

[We do not know; but imagine that there is little about the tough, fibrous roots that even a hog would care to eat unless closely pastured upon it, and then would root it up only to keep busy.—ED.]

**Colonies Good and Strong.**—I put 10 colonies in the cellar last fall and although they have had but one flight since October until March 5, they have come out good, and strong in numbers, but some a little short of stores. About 6 bee-keepers around here report  $\frac{1}{2}$  to  $\frac{1}{3}$  dead. I like the BEE JOURNAL very much.

SAMUEL SANDERSON.

Elmira, Ont., April 18, 1881.

**Expects a Fair Crop of Honey.**—My 400 colonies were put into cellars early last November, and are there still, mostly in good condition. If the weather is sufficiently warm so that they can be taken out soon, my loss will not exceed 10 per cent. I attribute my success mostly to the excellent condition my bees were in last fall, and to the cellars in which they were wintered. There are a few others here that can give reports equally good, but not many. There were perhaps 3,000 colonies in this county last fall, and from all accounts there will be less than 1,000 left this spring. The loss is something unprecedented here. Nearly all our small bee-keepers have lost all they had. I have spoken with a number that had from 25 to 100 colonies, and their loss is fully 75 per cent. Farmers generally have lost all, owing to the insufficient care given them. Possibly the problem how to winter bees successfully will be solved by the experience of this winter; if so, the loss will not be wholly without a gain. Appearances here are that the yield of honey will be fair in spite of the greatly reduced number of laborers. White clover and basswood, our chief honey sources, are very promising.

Jefferson, Wis. GEORGE GRIMM.

**Fresh Air in Cellars Necessary.**—The bees in my cellar, described in the JOURNAL, page 25, came through without the loss of a single colony, and all are in excellent condition. Another cellar that was not as well ventilated, and that had no stone floor did not winter as well, one died and several were weak. This proves to my satisfaction that fresh air and plenty of it is what bees want to winter well. I shall prepare all my cellars like the one described in the JOURNAL before another winter. The thermometer in this did not vary 3° all winter.

E. A. THOMAS.

Coleraine, Mass., April 16, 1881.

**Bees All Right.**—I took my bees from the cellar on April 16, after 5 months' confinement, and from 41 colonies and 3 nuclei I have saved 38, all strong except 2 that are queenless, which I shall double up with 2 that are rather weak. I am cleaning them up and feeding them granulated sugar and rye-flour. Bees are scarce in this vicinity; many bee-keepers have lost all. I wish the JOURNAL great success. T. LASHBROOK.

Waverly, Iowa, April 18, 1881.

**Loss from 80 to 100 Per Cent.**—Fully  $\frac{1}{2}$  of the bees in this country which could fly last fall will never do so any more, and as a consequence beeswax will be cheap. The old foggy bee-keepers who knew so much last fall have now very little to say about bees. I heard one say a few days ago that he thought that the honey had soured in the hives and killed the bees. I think he was a little sour on the bee question, too. I have lost about 80 per cent. of mine, others report a loss of 23 out of 25, some 100 per cent., and one of the most noted bee-keepers has lost 100 out of 138 (he is reported to have gathered and sold ten tons of honey from his bees last fall), so you see that he understood the business, but did not save his bees. Those that I saved had dry goods boxes turned upside down over the hives, and were packed between with straw in addition to the chaff in the hives. Scientific bee-keeping will stand a better chance now, for most of the box hive men have given up the business. Bees about here will have better care hereafter I hope. With renewed interest in bee-culture, I wish the BEE JOURNAL success.

GEO. M. LAWRENCE.

Warsaw, N. Y., April 18, 1881.

**Good Prospects.**—Bees gathered the first pollen this season on the 14th inst., from the elm. Brood rearing is progressing nicely. The white clover is green and growing. It is thick, and we have good prospects for a good honey season.

J. F. MOORE.

Morgan, Ky., April 19, 1881.

**Button Willow.**—I send you some cuttings of a shrub that beats anything for pollen for bees that I ever saw. If stuck in some damp ground they will grow just like willow-cuttings. Please give name. Spring is one month behind time.

D. A. PIKE.

Smithsburg, Md., April 18, 1881.

[The shrub is commonly known as button willow, and belongs to the numerous willow family. It grows quite plentiful in the Central and Western States, and is worthy of cultivation as well for its beauty as its enormous pollen yield.—ED.]

**Mortality of Bees in Iowa.**—I put 60 colonies in the cellar last fall, and have to-day taken out and examined them; there are only 25 alive, and some of them very weak. In this locality there is not over 1 colony in 10 left; some have lost all. I understand that Mr. W. H. Furman has only 7 or 8 left out of 60; another man lost 40, all he had. This is a poor prospect for supply dealers. I like the Weekly BEE JOURNAL very much.

THOS. B. QUINLAN.

Cedar Rapids, Iowa, April 15, 1881.

**Bees in Good Condition.**—I commenced the last season with 8 colonies, now I have 9 in good condition (having sold one I have only 8 to commence the season with.) My bees gathered some pollen this afternoon, the first this season.

JOS. H. FISHER.

Napoleon, O., April 18, 1881.

**Wintered Well.**—After 20 weeks confinement in the cellar I have taken my bees out, and find 5 dead out of 146. I put the hives close together in tiers, one above another, 2x3 scantling between. My bees are as strong and healthy as I ever knew them to be in the spring. I like the Weekly very much.

A. JENNINGS.

Medusa, N. Y., April 18, 1881.

**Overstocked With Bees.**—Last fall I reduced my colonies about 40, leaving 75, which wintered without loss. My greatest trouble is to prevent increase. As there is no sale for bees here I am certainly overstocked.

C. WEEKS.

Clifton, Tenn., April 7, 1881.

**Lost None.**—I put my 114 colonies in the cellar last November and took them out March 28. A few had the dysentery but I have lost none yet. I took them out a little too soon for it has been cold ever since, but they are doing well. Few bees are left here.

O. C. BLANCHARD.

Ironton, Wis., April 20, 1881.



**Bee Locations and Hives.**—This county is thickly settled; we have plenty of bloom of all kinds, and a running stream of water within 100 yards of my apiary; white and red clovers are abundant, and bees are few near here. Is this a good location for bees?

2. Which kind of hive do you prefer?

3. I am a carpenter and can make my own hives—are there any patents to hinder me from making a good hive?

4. Will it hurt to let bees fly when snow is on the ground? I like the BEE JOURNAL very much. F. V. Cambridge City, Ind.

[1. With plenty of bloom (which implies summer and fall flowers are abundant), a running stream of water (which in Indiana is generally an indication of basswood), and an abundance of white and red clovers, we cannot possibly imagine the absence of anything but plenty of bees to make it one of the very best locations.

2. We prefer the standard Langstroth. Many very successful and scientific apiarists, however, prefer a shorter and deeper frame, while some want a much longer and deeper one.

3. There is no patent in the way of making any of the standard hives—Langstroth, American, Gallup, or Simplicity. With any of these, managed promptly and scientifically during a good honey flow, results will be satisfactory; but all the patented clap-traps in the world will fail to secure a honey yield, when the bees return to the hive without having found any.

4. No; a few may be lost in the snow, but when bees are needing a flight badly, and have commenced soiling the combs, it is frequently profitable economy to sacrifice a few to save the many.—Ed.]

**It Beats All.**—The last season seems to be the worst one yet in the bee line. The causes here seem to have been a short crop of honey, then winter coming so suddenly, before scarcely anyone was prepared either in feeding or packing, and lastly the long confinement. But according to all reports the best are in the same boat. I hope this year will turn up the sure method for wintering. A. G. WOODBURY.

**Winter Still Here.**—My locality is, I think, as good for surplus honey as any part of Iowa. There is an abundance of linden timber all around here. I have saved some expressly for my bees. In November I put them on the south side of a tight board fence, about one foot apart. I packed straw all around except in front, filled the surplus boxes with dry oak leaves and then covered them with slough grass. I have 15 colonies left out of 25. In Warren county  $\frac{2}{3}$  of the bees are dead that were wintered out-of-doors; those in the cellars are there yet. We expected warm weather but this morning finds there are 10 inches of snow on the ground. I like the Weekly JOURNAL and I would not like to do without it.

HIBERT CLARK.  
Palmyra, Iowa, April 8, 1881.

**Good-Bye March.**—The month of March has come and gone and I earnestly hope we may never see another like it. It came in like a lion, continued like a lion, and went out like a whole cage of lions fighting and howling. It has been one continued cold blizzard all through with but 1 or 2 warm days in it. I say again, "hurrah for chaff packing on summer stands;" although winter set in early, continued severe and remained late, still I have not lost a colony and have only one weak, and that was wintered in an observatory hive and did well until March 15 when I found the glass sides were covered with ice and bees were being chilled as it melted. I therefore united them with another. If this month comes out warm I shall not lose any more. I find a large amount of brood and hatching bees in all my hives, some having 5 frames well filled. This is due, I think,

to strong colonies and packing on summer stands with plenty of honey. Many bees in this locality were packed on their summer stands but were not put in proper condition; many were packed after winter set in and seemed to die first, late packing causing them to fill with honey, and having no fly, afterwards took the dysentery; several I have examined which died with good packing, bees and honey dry, and emitting a sweet odor; these I learned ceased breeding in September, but were strong in old bees. I have found none starved. The honey yield last fall gave them a chance to fill up well. All withstood the severe weather of winter and were in good strong condition March 1, but died during the month. If all had had one frame of brood Oct. 15, they would have had bees to rear brood in February, which would have saved them. I gave several of my colonies a frame of brood from other hives Oct. 15, which saved them, I think. I look eagerly each week for the JOURNAL and follow its teachings. E. A. MORGAN.

Arcadia, Wis., March 31, 1881.

**Every Plan of Wintering Fails.**—A thaw the last week of March gave our bees a flight, and the bee-keeper a chance to look them over and see "what of life there yet remained." One-half of my colonies were then dead and of those left many were weak and by the time spring comes (if it ever does) there will not be over  $\frac{1}{2}$  left. It is cold and snowy yet, not a bud is swelling on anything; no farm work is done, and gloom rests over hill and valley. Most of the bees in this vicinity are dead. Three report a total loss; 2 have lost 4-5; another had 18 left out of 83. Myself and another have 2-5 living. I wintered on the summer stands without protection. Every method of packing was used by the apiarists referred to, while all used the same kind of hives, and those unprotected have done as well as those packed on the most approved plan. WM. MORRIS.

Anderson, Iowa, April 12, 1881.

**Swarming.**—I have no difficulty in wintering, and even in getting lots of honey; but the swarming propensity I cannot control satisfactorily. Please give information in the JOURNAL. E. Gloucester, Mass. A. PARSONS.

[The swarming propensity can generally be checked by removing 3 or 4 frames of sealed brood to some weak colony, putting empty combs or foundation in their place, and destroying all queen cells. Sometimes it can only be controlled by transposing a weak colony in place of the strong one. Should they still persist, then divide, removing the queen and leaving a ripe cell.—Ed.]

**The Survival of the Fittest.**—In the early part of November I put away 31 colonies with blankets on the frames, packed prairie hay around the hives and filled the caps; they were protected by a tight board fence on the north and west—all south exposures; tops were protected from rain and snow; 24 others were in American hives and 7 in Langstroth. I am feeding the weak and giving them all the rye-meal they will take. We have had fearful weather—no natural pollen yet. I expect to transfer all my bees from the American to Langstroth hives during the season, if possible. Nearly all the bees in this vicinity are dead; I might say at least 4-5 of them, yet under the law of the "survival of the fittest" we may expect our race to improve at least in endurance. The different theories about loss of bees are amusing to a novice; what is one man's meat is another's poison—there seems to be "death in the pot" from all quarters. I give my results for all they are worth, without comment. Out of 31 I have lost so far 7; expect to lose about  $\frac{1}{2}$  or nearly so. I am glad to do so well, when I look around and find death written everywhere. I like the change in the paper as it brings us information which in the Monthly would be too late to be of value to us. F. A. GROVE.

Kirkville, Mo., April 13, 1881.

**Seven From One Colony.**—I commenced last season with one colony, and as increase was my object I bought a lot of empty combs in Langstroth frames, fed sugar-syrup and stimulated breeding, and by dividing made 7 colonies from one. I wintered in chaff hives; after 68 days confinement they had a good flight, and are now all in good condition with brood in all stages. Of the bees in this county  $\frac{2}{3}$  are dead. Put me down for a life subscriber for the BEE JOURNAL. J. F. KIGHT.

Poseyville, Ind., March 21, 1881.

**District Conventions.**—I was much pleased with Mr. Heddon's observations on conventions. He is right. What we want is talk and discussion, not long-winded essays and speeches. Let me suggest that the subjects be made up and published, and then let the members write out their experience on that question in a short, terse manner, remembering that Caesar sent home the report of a whole campaign in 3 words. Let me give a sample—subject: Laying Worker.—I took from it all the combs without the bees, distributed them among strong colonies, replaced them with combs of brood and some bees from strong colonies, gave them a queen cell about to hatch, and in a few days all was lovely. Again: Dysentery.—Made several new swarms, noticed they had the dysentery; examined and found they had no honey; gave them some and all was right again. I wonder if St. Joseph county belongs to the southwest corner of Michigan.

E. B. SOUTHWICK.

Mendon, Mich., April 15, 1881.

**Royal Jelly.**—I see in the BEE JOURNAL of March 29, page 89, that Mr. C. J. Robinson takes the position that royal jelly is composed of honey, bee-bread and drones' semen, and that the semen of the drone is annually deposited in the combs, and affords a supply for queen-rearing after the destruction of the drones in the fall until their return the next season; also, that the semen in the royal jelly is the agent that impregnates the embryo ovary of the queen while in a larval state, and vivifies myriads of egg germs so they will produce drones in the course of time. We are furnished with no method of ascertaining the truth of the assertion that a deposit of drone's semen is made in the combs. Can it be so, and how shall we find the truth? Now, I propose a test, by removing from a colony of bees all the combs of the previous season, and put the bees upon comb foundation and feed well, before any drones make their appearance. After the eggs hatch in the new combs, remove the queen and continue to feed honey and flour, and see what the result will be. Camargo, Ill. A. SALISBURY.

**Ninety Per Cent. of Loss.**—There has been a fearful loss of bees in this section. Some old bee-keepers have lost as high as 90 per cent. I had last fall 20 colonies in the Shuck hives packed with chaff, and 8 colonies in single-walled hives with chaff cushions over the frames—all were on the summer stands. I lost 6 in the Shuck hives, and 6 in the single-walled, leaving 16 to begin the season with. I think the prospects are good for a plentiful honey flow. I like the Weekly JOURNAL very much, but prefer the size and shape of the Monthly. C. W. HELLEMS.

St. Catharines, Ont., April 11, 1881.

**No Loss of Bees.**—I am happily disappointed, for my bees have come through this long severe winter all right; they were confined in their hives from November until March, and I feared the result. I wintered on the summer stands in single-walled hives, packed with sorgum cane grindings, contracted the brood chamber on each side with division boards, placed cobs over the top boards of brood frames and then gunny sacks and old clothing. I have kept my bees mostly in the Dexter hive; it is like Root's simplicity, only more simple, and supplied with the American frame. I intend to transfer them into the "Fisk hive." This is a double-walled hive with dead air space between the walls, with a very slanting, self-cleaning, stationary bot-

tom board; it is a 2-story hive. The inside wall is both lathed and plastered, and contains 8 Langstroth frames. I am married to this last named hive as you see the name indicates, for I believe it is the best hive that can be produced, both for summering and wintering. I would like to see more in the bee-papers about plaster hives, lime absorbents, etc., for I take more to the lime idea than to chaff or sawdust. Honey bees fared poorly in this section last year; there was no surplus nor swarms and many have died this winter and spring, especially among the careless and uninitiated bee-keepers. I like the BEE JOURNAL very much, and so do those who subscribe here as far as I have heard from. A. W. FISK.

Bushnell, Ill., April 18, 1881.

**Why The Bees Die.**—About 80 per cent. of the bees in this vicinity are dead. The apparent causes of the mortality are: First, the 5 months of close confinement; 2d, severe and long continued cold weather; 3d, improperly constructed entrances stopped up by sleet, snow, and dead bees, causing smothering. I lost 2 out of 45 colonies from the 2d cause. O. FOSTER.

Mt. Vernon, Iowa.

**Long Winter.**—Bees in central Iowa are suffering greatly from long confinement and losses will be very heavy, more so than most of us are aware. Bees have been dead as to sunshine since the 20th of October, almost 6 months, and no signs for a flight for some time yet, as we have 6 inches of snow on the ground now and very cold nights. We may safely say that  $\frac{3}{4}$  the bees in this locality are dead. But I do not think I have lost very heavily yet. I never saw bees more quiet than mine are considering the length of time they have been up. But spring is a very bad time on bees here, we have so much cold wind in the spring; that of course results in spring dwindling and a great many bees are to go after farmers are satisfied that what bees they have left are all right. J. E. HASTINGS.

Carlisle, Iowa, April 14, 1881.

**Palestine Bees More Hardy.**—About 9-10 of the bees in northern Indiana are dead. I have lost 120 out of 170 colonies. I had in my apiary one queen imported from Palestine and about 50 young queens reared from her that have stood the winter well, although my Italian queens are nearly all dead. I think the Palestine bees will prove to be a very superior race in all respects. Nappanee, Ind. I. R. GOOD.

**Chips from Sweet Home.**—Our advertisement in the AMERICAN BEE JOURNAL has brought us more inquiries for our Sweet Home Raspberries than all other papers we advertised in. I send you a sample of such honey as our bees have tried to winter on. It is honey dew, which I understand to mean the secretion of aphides which is neither honey nor dew. D. D. PALMER.

New Boston, Ill.

**Upward Ventilation.**—My bees were wintered in the cellar, and those that had honey enough (though of a very poor quality) are all right. I was busy in the fall and thought they were gathering enough honey to winter on, but when I came to carry them into their winter quarters I found, when too late, that they were light, and the winter being extremely long, they starved to death. I do not think bees will ever die with the dysentery with plenty of good honey, a good, warm cellar, with plenty of upward ventilation; at least, that has been my experience for the last 15 years. My cellar is not a very dry one, but I never had the combs mold. I think that too little upward ventilation and poor honey have killed the bees. Nearly all the bees in this vicinity are dead. I have but 45 colonies left out of 80 last fall. Marley, Ill. FRANK SEARLES.

**Loss 30 Per Cent.**—Bees around here have suffered very severely; nearly all are dead. I have lost 30 per cent. O. CLUTE.

Iowa City, Iowa, April 15, 1881.



## SPECIAL NOTICES.

Single copies of the JOURNAL are sent postage paid for 5 cents each.

The attention of bee-keepers is directed to the advertisement of Champion Bee Hive Manufacturing Co.

Those who may wish to change from other editions to the Weekly, can do so by paying the difference.

The Volume of the BEE JOURNAL for 1880, bound in stiff paper covers, will be sent by mail, for \$1.50.

When changing a postoffice address, mention the old address as well as the new one.

We have prepared Ribbon Badges for bee-keepers, on which are printed a large bee in gold. Price 10 cents each, or \$8.00 per hundred.

Notices and advertisements intended for the Weekly BEE JOURNAL must reach this office by Friday of the week previous.

We can supply but a few more of the back numbers to new subscribers. If any want them, they must be sent for soon.

Constitutions and By-Laws for local Associations \$2 per 100. The name of the Association printed in the blanks for 50 cents extra.

Gray Hairs Are Honorable but their premature appearance is annoying. Parker's Hair Balsam is popular for cleanliness and promptly restoring the youthful color.

The date following the name on the wrapper label of this paper indicates the time to which you have paid. In making remittances, always send by postal order, registered letter, or by draft on Chicago or New York. Drafts on other cities, and local checks, are not taken by the banks in this city except at a discount of 25c., to pay expense of collecting them.

**PREMIUMS.**—For a club of 2, weekly we will give a copy of "Bee-Culture;" for a club of 5, weekly, we will give a copy of "Cook's Manual," bound in cloth; for a club of 6, we give a copy of the JOURNAL for a year free. Do not forget that it will pay to devote a few hours to the BEE JOURNAL.

At the Chicago meeting of the National Society we were requested to get photographs of the leading apiarists, to sell to those who wanted them. We can now supply the following at 25 cents each: Dzierzon, the Baron of Berlesch, and Langstroth. The likeness of Mr. Langstroth we have copied, is one furnished by his daughter, who says, "it is the only one ever taken when he was in good health and spirits." We are glad to be able to secure one of such a satisfactory nature.

Sample copies of the Weekly BEE JOURNAL will be sent free to any names that may be sent in. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office.

It would save us much trouble, if all would be particular to give their P.O. address and name, when writing to this office. We have several letters (some inclosing money) that have no name. Many others having no Post-office, County or State. Also, if you live near one postoffice and get your mail at another, be sure to give the address we have on our list.

## ELECTRICITY IS LIFE,

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PATENTED, 1874 & 1877.  
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Loss of Nervous or Vital Energy, Harass of Business, Excessive Mental Application, Malarious Poisoning or Acts of Imprudence,

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Electricity properly applied, with continuous current night and day to the body, will cure them. **IT IS NATURE'S REMEDY.** It gives force to the brain, digestive functions and circulatory forces, and renews the vital action so necessary to recovery.

Dr. Bryan's invention is patented, and has proved itself invaluable in many thousand cases.

Beware of Frauds—this is the Only Genuine.

Reader, if you are a sufferer it will do you no harm to send a statement of your case to us, and you will be advised by our Medical Electrician in relation to it. Enclose postage, and prompt attention will be given. Address, **ELECTRO APPLIANCE COMPANY, Limited,** Bond Street, near Broadway, New York.

Instead of sending silver money in letters, procure 1, 2 or 3 cent stamps. We can use them, and it is safer to send such than silver.

A Smooth Complexion can be had by every lady who will use Parker's Ginger Tonic. For promptly regulating the liver and kidneys and purifying the blood there is nothing like it, and this is the reason why it so quickly removes pimples and gives a rosy bloom to the cheek. See notice.

## CLUBBING LIST.

We supply the Weekly American Bee Journal and any of the following periodicals, for 1881, at the prices quoted in the last column of figures. The first column gives the regular price of both:

	Publisher's Price.	Club.
The Weekly Bee Journal (T. G. Newman)	\$2.00	
and Gleanings in Bee-Culture (A. I. Root)	\$3.00	2.75
Bee-Keepers' Magazine (A. J. King)	\$3.00	2.60
Bee-Keepers' Exchange (J. H. Nellis)	\$2.75	2.50
The 4 above-named papers	4.75	3.75
Bee-Keepers' Instructor (W. Thomas)	\$2.50	2.35
Bee-Keepers' Guide (A. G. Hull)	\$2.50	2.35
The 6 above-named papers	7.75	5.00
Prof. Cook's Manual (bound in cloth)	\$3.25	3.00
Bee-Culture (T. G. Newman)	\$2.40	2.25
For Semi-monthly Bee Journal, \$1.00 less.		
For Monthly Bee Journal, \$1.50 less.		

## Honey and Beeswax Market.

## BUYERS' QUOTATIONS.

## CHICAGO.

**HONEY.**—The market is plentifully supplied with honey, and sales are slow at weak, easy prices. Quotable at 18¢/lb. for strictly choice white comb in 1 and 2 lb. boxes; at 14¢/lb. for fair to good in large packages, and at 10¢/lb. for common dark-colored and broken lots. Extracted, 9¢/lb.

**BEESWAX.**—Choice yellow, 20¢/lb.; dark, 15¢/lb.

## NEW YORK.

**HONEY.**—Best white comb honey, small neat packages, 14¢/lb.; fair do., 14¢/lb.; dark do., 11¢/lb.; large boxes sell for about 2c. under above. White extracted, 9¢/lb.; dark, 7¢/lb.; southern strained, 8¢/lb.

**BEESWAX.**—Prime quality, 20¢/lb.

## CINCINNATI.

**HONEY.**—The market for extracted clover honey is good, at 8¢/lb. Comb honey is of slow sale at 16¢ for the best.

**BEESWAX.**—18¢/lb.

## SAN FRANCISCO.

**HONEY.**—Shipments of 1,100 cases and 25 bbls. of honey went forward via Cape Horn to Liverpool this week. Reports concerning the coming crop are conflicting, the majority contending it will be rather light. With the present surplus now on hand, buyers apprehend no scarcity. We quote white comb, 12¢/lb.; dark to 10¢/lb.; extracted, choice to extra white, 6¢/lb.; dark and candied, 4¢/lb.

**BEESWAX.**—22¢/lb., as to color.  
STEARNS & SMITH, 425 Front Street.  
San Francisco, Cal., April 9, 1881.

## Bingham's Smoker Corner.

Coleraine, Mass., April 11, 1881.

Messrs. Bingham & Hetherington,  
Dear Sirs:—I concluded to use the large smoker instead of sending it away. It is the smoker. I don't want any better. Shall throw all others away.  
Respectfully, E. A. THOMAS.

## HENRY ALLEY,

Wenham, Essex County, Mass.  
Cyprian, Holy Land, Hungarian and Italian  
QUEENS AND BEES.

I have made queen-breeding a specialty for the last 20 years. All my queens are reared on a new and scientific principle, combining beauty, purity, industry and docility. No in-and-in or nuclei-bred queens sent out by me. All queens warranted pure, and safe arrival guaranteed, by mail. Warranted queens \$1.00 each, choice selected \$1.50 each, tested \$2.00 each. Send for my 20th annual circular and price list. Try these new races and their crosses. 17w2t

## The Sweet Home RASPBERRY

Is the largest, most productive, (bearing 125 bushels per acre), firmest, best shipping Raspberry ever introduced; perfectly hardy, been tested by 20¢ below zero; sells the best; costs less to pick, because it is firmer; and uniformly larger than any other Black Cap. For Circular address,  
D. D. PALMER, New Boston, Ill.

## Bees for Sale.

I will sell 20 Good Colonies of Black and Italian Bees cheap for cash. Bees are in good movable frame hives. For particulars address,  
L. E. WELCH,  
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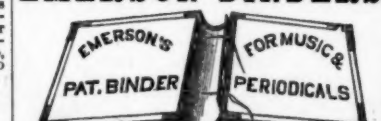
## WEST OF THE MISSOURI.

It is a 16-page Semi-Monthly, and is full of valuable information to the farming public—furnishes the most reliable information to be had for those contemplating going West.  
Send 6 cents in stamps for sample copy. Subscription price \$1.50 per year.

McBRIDE & DRUSE, Editors,

17w3t Lincoln, Nebraska.

## EMERSON BINDERS.



17 Binders for the Weekly Bee Journal, of 1881, cloth and paper, postpaid, 85 cents.

We can furnish Emerson's Binders, gilt lettered on the back, for AMERICAN BEE JOURNAL for 1880, at the following prices, postage paid:

Cloth and paper, each.....35c.  
Leather and cloth.....75c.

17 We can also furnish the Binder for any Paper or Magazine desired.

THOMAS G. NEWMAN,  
974 West Madison Street, Chicago, Ill.

## Books for Bee-Keepers.

**Cook's Manual of the Apisary.**—Entirely rewritten, greatly enlarged and elegantly illustrated, and is fully up with the times on every conceivable subject that interests the apiarist. It is not only instructive, but intensely interesting and thoroughly practical. The book is a masterly production, and one that no bee-keeper, however limited his means, can afford to do without. Cloth, \$1.25; paper, \$1.

**Quinby's New Bee-Keeping.** by L. C. Root.—The author has treated the subject of Bee-keeping in a manner that cannot fail to interest all. Its style is plain and forcible, making all its readers sensible that the author is master of the subject. \$1.50.

**Novice's A B C of Bee-Culture.** by A. I. Root. This embraces "everything pertaining to the care of the honey-bee," and is valuable to beginners and those more advanced. Cloth, \$1.25; paper, \$1.00.

**King's Bee-Keepers' Text-Book.** by A. J. King.—This edition is revised and brought down to the present time. Cloth, \$1.00; paper, 75c.

**Langstroth on the Hive and Honey Bee.** This is a standard scientific work. Price, \$2.00.

**Blessed Bees.** by John Allen.—A romance of bee-keeping, full of practical information and contagious enthusiasm. Cloth, \$1.00.

**Bee-Culture; or Successful Management of the Apisary.** by Thomas G. Newman.—This pamphlet embraces the following subjects: The Location of the Apisary—Honey Plants—Queen Rearing—Feeding—Swarming—Dividing—Transferring—Italianizing—Introducing Queens—Extracting—Quietening and Handling Bees—The Newest Method of Preparing Honey for Market, etc. It is published in English and German. Price for either edition, 40 cents; postpaid, or \$3.00 per dozen.

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